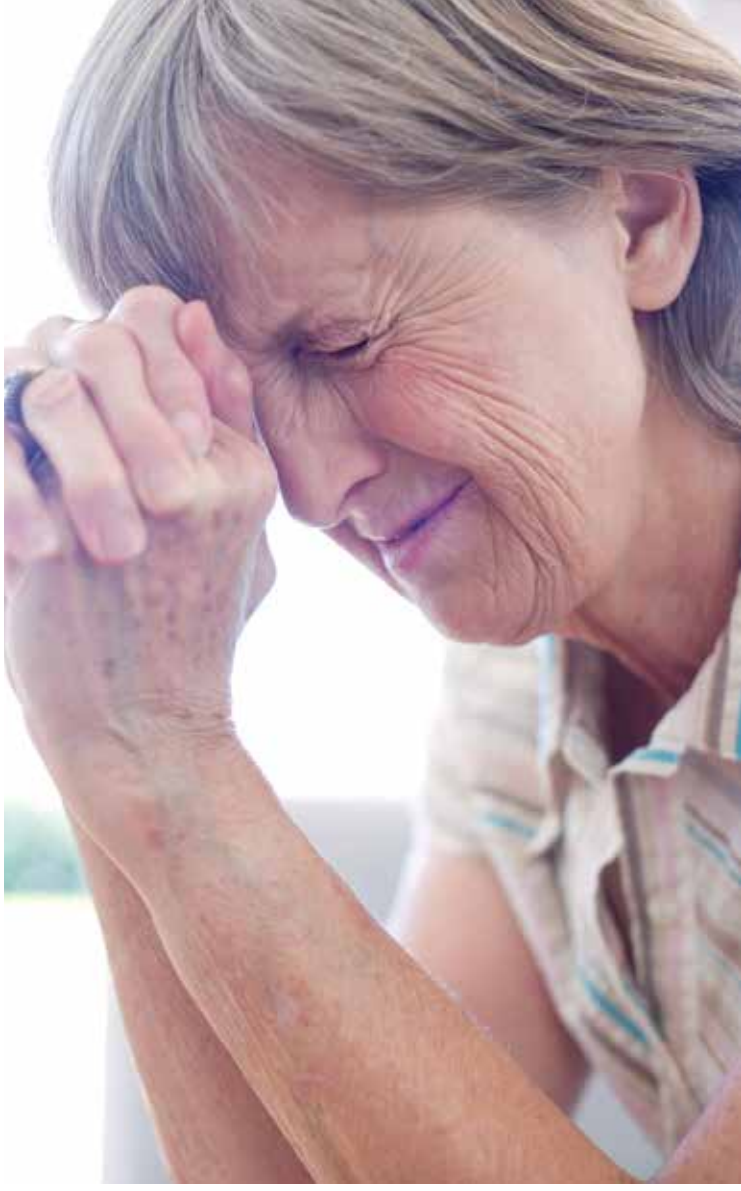
Psychological therapies for chronic pain and depression



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Psychological (nondrug) treatments have been shown to be effective for both chronic pain and depression. In contrast to drug therapy, in which the goal of treatment is usually symptom reduction, the core goal of psychological treatments is not always a reduction in pain. Psychological therapy is typically focused on improving function and quality of life despite the presence of ongoing pain.

Chronic pain and depression frequently coexist and may worsen the prognosis of each individual condition. A previous article published in the August 2014 issue of *Pain Management Today* explored the role of antidepressant medications in chronic pain and depression.[1] This article specifically reviews the use of psychological therapies for patients with comorbid pain and depression. Other types of nondrug treatments, such as pain education, hypnosis and repetitive transcranial magnetic stimulation (which has been validated for use in depression but not chronic pain[2]), are not covered in this article.

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Key points

- **Psychological therapies have much to offer individuals who have chronic pain and comorbid depression, and they are a core component of the multidisciplinary management of chronic pain.**
- **Patients should be encouraged to look beyond pharmaceutical treatments for chronic pain and depression.**
- **Psychological therapy is frequently focused on improving function and quality of life despite the presence of persistent pain.**
- **Specific treatment components may include relaxation training, graded behavioural activation, changing how patients interact with their thoughts and mindfulness.**

The diagnosis of major depressive disorder remains largely unchanged with the advent of the *Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5)*.[3] Core criterion symptoms (depressed mood, loss of interest or pleasure, fatigue, guilt/worthlessness, diminished concentration, suicidality and changes in activity, sleep, appetite and weight) remain the same and the diagnosis still requires five or more of nine symptoms to be present during the same two-week period. The symptoms must represent a change from previous functioning and at least one of the five symptoms must be either depressed mood or loss of interest or pleasure.[3] There will be many patients with chronic pain who do not meet the criteria for major depressive disorder but who seek or require treatment for depressive symptoms that are causing significant distress or impairment.

Assessment of depression should include a full evaluation of suicide risk, including factors such as ready access to high lethality medications (e.g. opioids). The duration and severity of depression should be established and the presence of comorbidities (e.g. anxiety, alcohol abuse) determined. This information can assist in deciding whether treatment with antidepressant medication or nondrug strategies is more appropriate. The choice of drug versus nondrug treatment for depression should be evidence based and carefully tailored to individual patient needs and preferences but in practice it may also depend on treatment availability.

In general terms, psychological therapy for depression should be considered first line in people with milder depression and when indicated by the presence of clinical features such as psychosocial issues and interpersonal problems. Psychological therapies that are used for chronic pain are also effective treatments for depression, even though the exact session content will vary according to the specific therapeutic focus.[4] Physical activity has also been shown to ameliorate the risk of developing depression and there is a large evidence base linking exercise treatment with mood enhancement.[5]

Importance of identifying depression in the presence of chronic pain

The identification of depression in the presence of chronic pain can be difficult. There is a significant overlap in the symptoms of depression and chronic pain (e.g. disturbed sleep and social withdrawal) which can make the conditions difficult to distinguish. Depressive symptomatology also becomes increasingly problematic as pain severity and functional impairment increase. Conversely, depression impedes patient compliance with pain rehabilitation strategies.[6]

Although it remains unclear whether patients with comorbid depression and pain are less responsive to usual management strategies for depression than those with depression alone, it is clear that failure to address depression can preclude effective pain treatment. In short, incorporating the assessment and treatment of both depression and pain seems necessary to optimise outcomes for patients with both conditions.

Psychological therapies for chronic pain and depression

Psychological therapies commonly used in the treatment of chronic pain and comorbid depression include behaviour therapy (BT), cognitive behaviour therapy (CBT), acceptance and commitment therapy (ACT) and mindfulness-based approaches. In contrast to drug therapy, in which the goal of treatment is often symptom reduction, pain reduction is not a core goal in psychological treatments.

Although the effect sizes of psychological therapies in chronic pain are generally small to moderate, the strongest effect is seen on mood rather than pain itself.[7] Psychological therapy is frequently focused on improving function and quality of life in the presence of pain. Treatment success may be defined by increasing levels of engagement with valued activities, attainment of core life goals and improvements in overall quality of life. In other words, success is doing more of the things that make life better.

Behaviour therapy

BT asserts that a problem is defined by its outwardly observable signs.[8] Pain is therefore defined by pain behaviours (e.g. wincing, limping, groaning, rubbing a particular area of the body), which are influenced by a range of factors including pain duration, prior learning and environmental contingencies. For pain with comorbid depression, the significant overlap in associated behaviours can make it difficult to accurately determine which condition has caused which behaviour. This is not necessarily problematic for treatment because BT targets the behaviours themselves rather than the condition. Behavioural treatments focus on the contingencies associated with various behaviours by reinforcing wellness/adaptive behaviours and extinguishing pain behaviours. Behavioural reinforcement occurs via the attainment of positive consequences and the avoidance of negative ones. Although BT has been widely used in the treatment of chronic pain and depression, recent evidence suggest that it offers limited benefit as a stand-alone treatment, aside from small improvements in catastrophising immediately following intervention.[7]

Cognitive behaviour therapy

Founded in behaviourist ideology, CBT has an expanded focus – recognising the role that cognitive and emotional factors play in the disability process. Treatment therefore focuses not only on problem behaviours, but also on the catastrophic/unhelpful thinking patterns and emotional states associated with them. CBT is a directive therapy that incorporates behavioural strategies and encourages individuals to explore and challenge their unhelpful thinking patterns and to learn to recognise and regulate emotional responses. CBT emphases the link between thoughts, behaviours and emotions in determining patterns of engagement with the environment.[9] CBT is the most widely validated psychological treatment in this area of clinical practice. It has been shown to be effective for chronic pain and depression, impacting most on mood and catastrophic thinking, with smaller improvements for pain.[7]

Acceptance and commitment therapy

ACT posits that suffering is a normal part of the human experience and that the best way to live a rich and meaningful life is to make room for the suffering that is an integral part of it – the alternative being to focus efforts on fighting against suffering, potentially resulting in less engagement with meaningful life activities. ACT asserts that life gets better when we put deliberate effort into living in accordance with our values and when we keep our attention focused on the present moment, rather than directing efforts to what may be an unwinnable fight against pain.[10] Exploring alternative ways to meet values is often a core challenge in therapy. Many patients find that over time the consequences of pain and/or depression mean that they can no longer meet their values in the same ways as they had previously. ACT is a nondirective approach that draws on metaphors, experiential learning, mindfulness and exposure to assist individuals in developing more workable patterns of interacting with the world around them. A developing literature base has now established ACT as an effective treatment for chronic pain, with maintenance of treatment gains extending to three years of follow up.[11]

Mindfulness

Mindfulness promotes being present in the current moment – being aware of, and engaged with, what is happening right now. Mindfulness teaches individuals to simply notice what is happening, without judgement or interpretation. In treatment, the aim is to separate the physical sensations of pain from the internal judgements we make about them.[12] The level of catastrophising and emotional arousal that may occur in response to physical sensations of pain is thereby reduced, disrupting the cycle of disability. Mindfulness-based approaches have been associated with reductions in pain intensity and improvements in body image, function and mood.[13]

Specific skills or treatment components common to psychological therapies

Irrespective of theoretical approach, there are a range of skills or components common to nondrug treatments for chronic pain, all of which include education and a rationale for intervention. Increasingly, these components are being delivered in flexible ways, including individual sessions, multidisciplinary group programmes[14] and telephone or internet-based services.[15] Selecting the best service model for patients is often determined by patient preference and issues of geography (e.g. internet delivery for remote locations).

Relaxation training

Relaxation training is a common component of nondrug approaches to chronic pain. The potential benefits of relaxation include the reduction of autonomic arousal and muscle tension, and postulated biochemical changes (e.g. release of endorphins), which may dampen down the pain cycle, reduce central sensitisation and improve mood, diverting attention away from physical sensations and fostering a sense of control over the body.[13] There is currently no evidence suggesting superiority of any one particular relaxation technique, although patient preference may play a role in enhancing treatment adherence.

Graded behavioural activation

Withdrawal, isolation and reduced activity are common consequences of both pain and depression and are key maintaining factors in the associated cycles of disability. Patients frequently express a need or desire to feel better before resuming activities. Graded behavioural activation involves a structured approach to increasing activity levels despite ongoing pain and depression. Initial interventions may encourage daily hygiene (e.g. showers, dressing) or walks to the front door or letterbox. Graded and incremental increases in activities (commonly called activity pacing) are encouraged because bursts of overactivity can undermine activation attempts by reinforcing unhelpful thinking (e.g. 'I knew I shouldn't have done that') or perpetuating 'boom-bust' cycles. Behavioural activation affords numerous potential benefits, including increases in functional ability and encouraging a shift in perspective away from restrictions and towards capabilities.[9]

Changing how we interact with our thoughts

Thoughts are powerful contributors to the disability cycle. A good example of this is fear-avoidance. Fear-avoidance is the process whereby an individual, in an attempt to minimise harm/damage, avoids activity that they anticipate will cause pain.[16] It may be driven by a belief that pain equals harm. Although the intentions are sound (why would you want to do something that you genuinely thought would cause you harm?), the overall outcome can be a cycle of inactivity, increasing disability and withdrawal.

CBT encourages patients to explore the accuracy of their thoughts and to use the evidence to formulate new, more adaptive responses. Behavioural experiments may be undertaken to test the veracity of underlying assumptions. ACT, on the other hand, is concerned more with impact than accuracy – encouraging individuals to notice thoughts as they occur and recognise that they have a choice in how they respond to them (psychological flexibility). In both cases, the aim of treatment is for individuals to interact differently with their thoughts, leading to more adaptive patterns of life engagement.

Supporting nondrug treatments in general practice

Nondrug treatments are not the exclusive realm of psychologists and psychiatrists. GPs are crucial for encouraging patients to look beyond pharmaceutical treatments for chronic pain and depression. Introducing cognitive and other nonpharmacological concepts early in the process, before unhelpful conceptualisations are fully entrenched, can facilitate uptake. In doing so, it is important to

explicitly discuss the definition of treatment success: emphasising the key goal of improvement in quality of life and function irrespective of changes in ratings of pain severity.

Patients should be encouraged to consider their patterns of responding in the face of pain, to recognise where they have choices to respond differently and to use these choice points to formulate a plan for self-management. Some key questions for patients to consider are:

- Do I have to wait for the pain to be completely gone before I get back to living, or are there some things I can do now even though the pain continues?
- Am I willing to experience pain in order to do the things that really matter to me?
- Can I do those things even though I have pain? (I might not want to, but can I?)
- If I can, what will it take to make me do it? What is important enough?
- I did not choose to have chronic pain but, given it is here with me, what do I want my life to be about? What really matters in the big picture?

There are numerous screening measures available for use in general practice that can aid in the assessment of factors, such as psychological distress (i.e. Kessler psychological distress scale [K10])[17] and pain catastrophising (e.g. Pain Catastrophising Scale [PCS]),[18] and which can provide supplemental information to inform decisions regarding referral. In general, referral of the patient to a psychologist may be appropriate if the following indicators are present:

- significant pain-related lifestyle changes
- history of other stress-related disorders
- a correlation between symptoms and significant life events
- a perception of over-reliance on medications and/or therapy
- pronounced inactivity
- significant mood disturbance
- perception of inadequate coping
- willingness to adopt a self-management approach.

Referral of the patient to a tertiary pain service should be considered once common medical options have been exhausted and the patient has trialled routine nonpharmacological approaches such as psychological intervention, physiotherapy and graded exercise.

Conclusion

Many of the psychological therapies used in people with chronic pain are also effective treatments for depression. Psychological approaches to working with chronic pain frequently focus on improving function and quality of life despite the ongoing presence of pain (i.e. they are not necessarily focused on a reduction in symptoms) and are often driven by patient goals and values. Comorbid depression should be managed in the usual manner because failure to address depression may preclude effective pain treatment. **PMT**

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